IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the instant application. The present status of each claim is indicated in parentheses following the claim number. An instruction line precedes each claim that is amended or cancelled by the instant paper.

Please **amend** claim 1 as follows:

1. (CURRENTLY AMENDED) ~~A peptide~~An isolated and purified having an amino acid sequence selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5);

VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6);

RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7);

RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8);

RVVRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10);

VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11);

and

RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV

(SEQ ID NO:12).

Please **cancel** claims 2-7 without prejudice.

2-7 (CANCELLED)

8. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RVVRVVRRVVRR (SEQ ID NO:4)

9. (ORIGINAL) A composition comprising the peptide of claim 8 and a carrier.

10. (ORIGINAL) The peptide of claim 1 having the amino acid sequence: RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5).

11. (ORIGINAL) A composition comprising the peptide of claim 10 and a carrier.

12. (ORIGINAL) The peptide of claim 1 having the amino acid sequence: VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6).

13. (ORIGINAL) A composition comprising the peptide of claim 12 and a carrier.

14. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7);

15. (ORIGINAL) A composition comprising the peptide of claim 14 and a carrier.

16. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8).

17. (ORIGINAL) A composition comprising the peptide of claim 16 and a carrier.

18. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RVVRVVRRWVRR (SEQ ID NO:9).

19. (ORIGINAL) A composition comprising the peptide of claim 18 and a carrier.

20. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10).

21. (ORIGINAL) A composition comprising the peptide of claim 20 and a carrier.

22. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11);

23. (ORIGINAL) A composition comprising the peptide of claim 23 and a carrier.

24. (ORIGINAL) The peptide of claim 1 having the amino acid sequence:

RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV (SEQ ID NO:12).

25. (ORIGINAL) A composition comprising the peptide of claim 24 and a carrier.

26. (ORIGINAL) The peptide of claim 1 wherein said peptide has antimicrobial activity.

Please **amend** claim 27 as follows:

27. (CURRENTLY AMENDED) The peptide of claim 1 wherein said peptide has antimicrobial activity in a low salt medium.

Please **amend** claim 28 as follows:

28. (CURRENTLY AMENDED) The peptide of claim 1 wherein said peptide has antimicrobial activity in ~~physiologic~~physiological salt.

Please **amend** claim 29 as follows:

29. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide ~~analog wherein said peptide is~~analog, said peptide having been modified to optimize amphipathicity.

Please **amend** claim 30 as follows:

30. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide analog, said peptide comprising an arginine residue on said

peptide's charged face, wherein said arginine residue is substituted with another amino acid residue and wherein said peptide analog comprises an amphipathic α-helical structure.

Please **amend** claim 31 as follows:

31. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide analog, said peptide comprising a tryptophan residue on said peptide's hydrophobic face, wherein said tryptophan residue is substituted with another amino acid residue and wherein said peptide analog comprises an amphipathic α-helical structure.

Please **amend** claim 32 as follows:

32. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide analog, said peptide comprising a valine residue on said peptide's hydrophobic face, wherein said valine residue is substituted with another amino acid residue and

wherein said peptide analog comprises an amphipathic α-helical structure.

Please **amend** claim 33 as follows:

33. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide analog, said peptide comprising a tryptophan residue and a valine residue on said peptide's hydrophobic face, wherein said tryptophan residue and said valine residue is substituted with another amino acid residue and wherein said peptide analog comprises an amphipathic α-helical structure.

Please **amend** claim 34 as follows:

34. (CURRENTLY AMENDED) ~~An LLP-1~~An isolated and purified lentiviral lytic peptide-1 peptide analog~~, said peptide~~ comprising an amino acid sequence selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5);

VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6);

RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7);

RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8);

RVVRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10);

VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11); and

RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV (SEQ ID NO:12),

and at least one additional ~~residues to increase its length,~~ residue wherein said peptide analog comprises an amphipathic α-helical structure.

35. (PREVIOUSLY AMENDED) A solid phase substrate comprising at least one peptide selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5);

VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6);

RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7);

RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8);

RVVRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10);

VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11); and

RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV (SEQ ID NO:12).

36. (ORIGINAL) The solid phase substrate of claim 35 wherein said solid phase substrate is a prosthetic device.

37. (ORIGINAL) The solid phase substrate of claim 35 wherein the prosthetic device is a prosthetic joint.

Please **amend** claim 38 as follows:

38. (CURRENTLY AMENDED) The peptide of claim ~~1,~~1 wherein said peptide ~~comprising~~further comprises at least one cysteine residue.

39. (ORIGINAL) The peptide of claim 39 wherein said peptide is a disulfide linked dimeric peptide.

Please **amend** claim 40 as follows:

40. (CURRENTLY AMENDED) ~~A peptide-cargo~~An isolated and purified peptide-cargo complex comprising a cargo and a peptide selected from the group consisting of:

RVVRVVRRVVRR (SEQ ID NO:4);

RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5);

VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6);

RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7);

RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8);

RVVRVVRRWVRR (SEQ ID NO:9);

RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10);

VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11);

and

RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV

(SEQ ID NO:12).

41. (ORIGINAL) The peptide-cargo complex of claim 40 wherein said peptide has antimicrobial activity and said cargo increases the antimicrobial activity of said peptide.

Please **cancel** claims 42-65 without prejudice.

42-65 (CANCELLED)